

REMARKS

Claims 1, 2, and 4-13 are pending. By this Amendment, claim 1 has been amended and claim 14 has been canceled. Claim 1 has been amended as follows:

“A thermistor comprising:

a resistance element having upper and lower surfaces and showing a resistance varying characteristics according to the change of temperature;

first and second conductive layers formed on the upper surface of the resistance element, the first and second conductive layers being adjacently engaged to each other with a non-conductive gap interposed therebetween;

first and second electrodes formed on the lower surface of the resistance element and electrically separated from each other;

a first connector ~~for~~ conductively electrically connecting the first conductive layer to the first electrode; and

a second connector ~~for~~ conductively electrically connecting the second conductive layer to the second electrode,

wherein the first and second conductive layers and the first and second electrodes are arranged so that the first conductive layer and the second electrode face each other and substantially overlap each other with the resistance element interposed therebetween, and the second conductive layer and the first electrode face each other and substantially overlap each other with the resistance element interposed therebetween.”

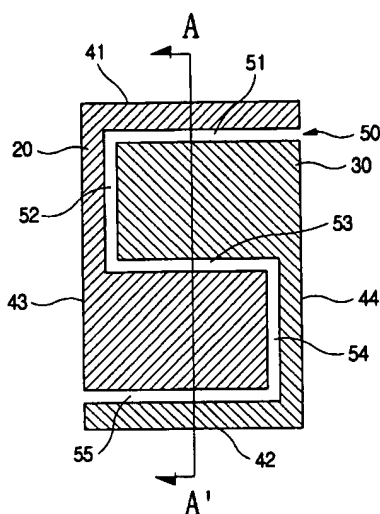
As amended, claim 1 overcomes the Examiner’s rejections, since none of the prior art references cited by the Examiner disclose electrodes and conductive layers that are physically arranged and electrically connected as required by amended claim 1. Specifically, none of the

prior art references shows a conductive electrical connection of “the first conductive layer to the first electrode,” and of “the second conductive layer to the second electrode,” among other claim limitations. Therefore, claim 1 is believed to be patentable over the prior art.

A summary of the distinctions between the invention and the prior art references is provided below:

Claim 1 is patentably distinguishable from Chan et al (US 5,852,397); see figures below.

The first and second conductive layers (20 and 30, Fig. 2) of the invention are adjacently engaged to each other with a non-conductive layer (50 and 55, Fig. 2) interposed therebetween.



<<Fig. 2 of the Invention >>

Chan et al. does not disclose any configuration in which the first conductive layer (49, Figs. 8 and 9) and the second electrode (35, Fig. 9) are facing or overlapped with each other.

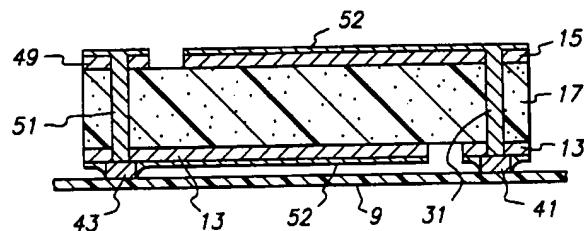


FIG. 8

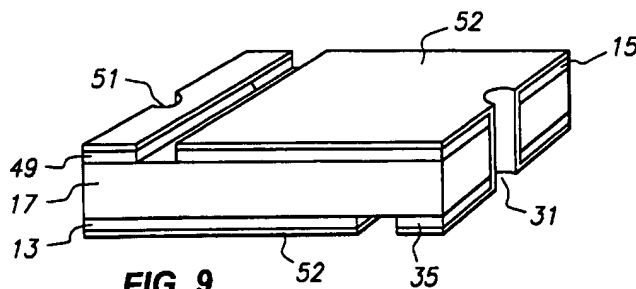
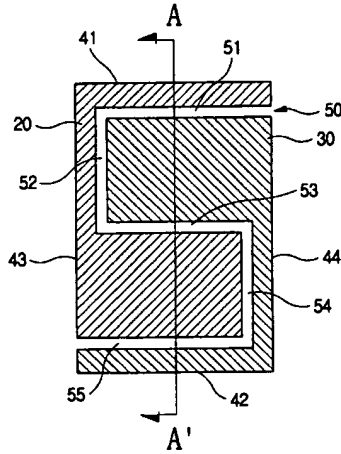


FIG. 9

<<Figures of Chan et al. >>

Claim 1 is patentably distinguishable from Zhang et al. (US 5,831,510); see figures below.

The first and second conductive layers (20 and 30, Fig. 2) of the invention are adjacently engaged to each other with a non-conductive layer (50 and 55, Fig. 2) interposed therebetween.



<<Fig. 2 of the Invention >>

Zhang et al. does not disclose any configuration in which the second conductive layer (13', Fig. 11) and the first electrode (15', Fig. 11) are facing or overlapped with each other.

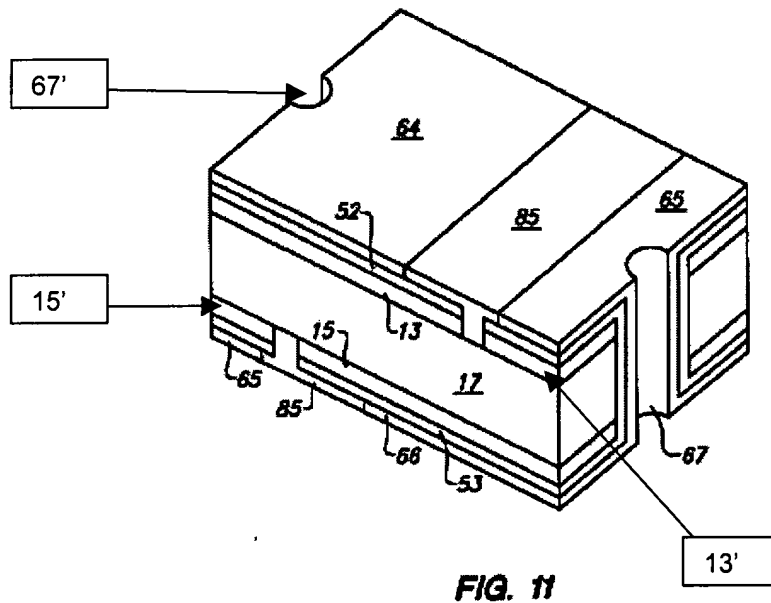
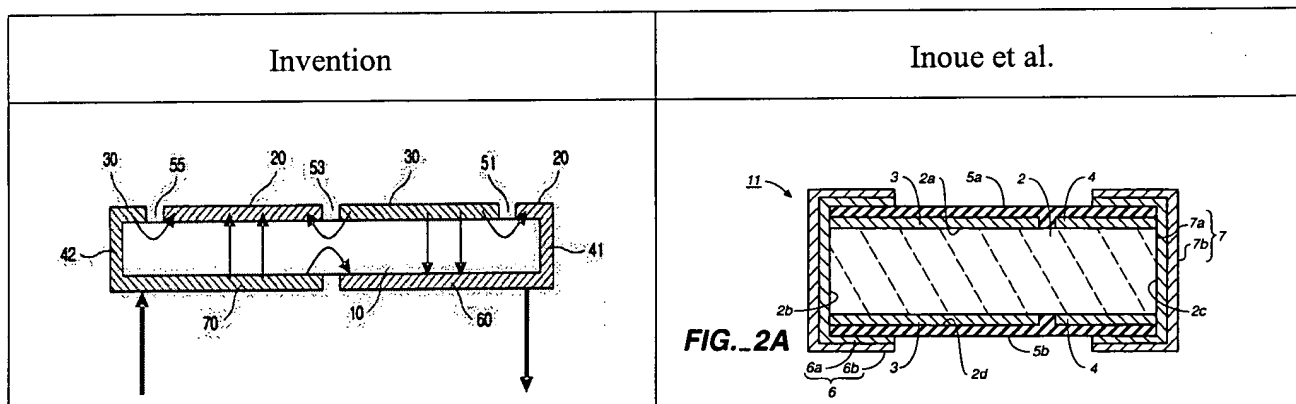


FIG. 11

Claim 1 is patentably distinguishable from Inoue et al. (US 6,172,592); see figures below.

The first connector of the invention electrically connects the first conductive layer (20) and the first electrode (60), while a first connector (6, see Fig. 2A) of Inoue et al. electrically connects the first conductive layer (3, upper, see Fig. 2A) and the second electrode (3, lower, see Fig. 2A). In addition, the second connector of the invention electrically connects the second conductive layer (30) and the second electrode (70), while a second connector (7, see Fig. 2A) of Inoue et al. electrically connects the second conductive layer (4, upper, see Fig. 2A) and the first electrode (4, lower, see Fig. 2A).



In Inoue, the first conductive layer (3, upper) and the second electrode (3, lower) have the same polarities, and the second conductive layer (4, upper) and the first electrode (4, lower) have the same polarities. This is in contrast to the invention in which the first conductive layer (20) and the second electrode (70) have opposite polarities, and the second conductive layer (30) and the first electrode (60) also have opposite polarities.

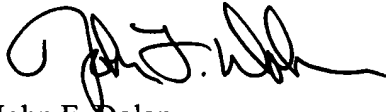
Therefore the current paths of the invention are patentably distinct from those of Inoue.

Claims 2 and 4-13 all depend from claim 1, either directly or indirectly, and are therefore also believed to be patentable for at least the reasons provided above for claim 1.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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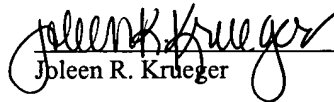
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